



## INTERNAL CORRESPONDENCE

## UNION CARBIDE PLASTICS COMPANY

RIVER ROAD, ROUND BROOK, NEW JERSEY

To (Name) Mr. G. J. Kuzmak  
 Company Union Carbide Corporation  
 Location Plastics Division  
 Bound Brook, New Jersey

Date October 8, 1964  
 Originating Dept. R & D - Applications

Answering letter date

Copy to ~~Mr. D. R. Albright - BB~~  
 Mr. F. J. Gallo - BB  
 Mr. R. E. Graebert - BB  
 Mr. C. F. Martino - BB  
 Mr. J. Olszewski - BB  
 Mr. P. B. Potter - NY  
 Mr. G. Pugliese - BB  
 Mr. J. Raffaniello - BB  
 Mr. C. J. Smith - BB  
 Mr. A. L. Steib - BB  
 Mr. P. A. Thomas - BB

Subject *fil* Production Run BMMA-5715

The third production run for BMMA-5715 is scheduled to begin on October 9, 1964, during which time 25,000 pounds of the medium-impact molding material will be produced to fill the requirements for Cutler-Hammer in Milwaukee, Wisconsin.

In order to obtain a more pourable product, I propose to begin the run using the OXX screens (instead of IXX) and blend for 45 minutes in the ribbon blender (instead of the tumbler). The OXX screens will be used to compensate for the fines generated in the blender. If the fines buildup becomes excessive, we will switch back to the IXX screens.

Each load of material put through the ribbon blender will contain 1000 pounds from previously made batch 4 BMMA-5715. Arrangements have been made with Mr. J. Cleveland to accomplish this.

Cutler-Hammer has expressed concern over the "caution label" appearing on our bags. Accordingly, Mr. J. R. Wilkinson has authorized the painting or blanking out of this label on all bags to be used for packaging this and all future materials for Cutler-Hammer (all grade 16).

*Lewis D. Fishberg*  
 Lewis D. Fishberg

LDF:gvc

UCASB00958488

SC-EEI-0760


**UNION  
CARBIDE**

## INTERNAL CORRESPONDENCE

## UNION CARBIDE PLASTICS COMPANY

RIVER ROAD, BOUND BROOK, NEW JERSEY

|                                                                                                                        |                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>To (Name)</b> Mr. G. J. Kuzmak<br><b>Company</b> Plastics Division - UCC<br><b>Location</b> Bound Brook, New Jersey | <b>Date</b> November 16, 1964<br><br><b>Originating Dept.</b> Applications R & D - Division 15<br><br><b>Answering letter date</b><br><br><b>Subject</b> Production Run of <u>BMMA-5715</u> |
| <b>Copy to</b> See distribution below.                                                                                 |                                                                                                                                                                                             |

A "Development Department Request for Use of Production Department Equipment" is being submitted to initiate a production run to make 25,000 pounds of BMMA-5715, Black 25, the new medium impact molding material designed to compete with Durez 1544 and 22532. The material will be made on Unit BA. Cutler-Hammer, in Milwaukee, Wisconsin, has placed an order for this material in a special grade 16.

The manufacturing instructions are attached. During the last run, there was some problem in attaining the required plasticity. For this reason, the glycerol monostearate will be added during the manufacture of the resin instead of at the time of the addition of the other fillers. Experience has shown that, when this was done with other products, a definite improvement in plasticity control resulted. This change in procedure should also give better dispersion of the glycerol monostearate, reducing the smear level which was quite pronounced in the last production batch of BMMA-5715.

As in the previous run, the "caution label" on the bags must be blanked out. Also, each pallet should contain a maximum of 1500 pounds.

LDF:VLK

*Lewis D. Fishberg*  
 Lewis D. Fishberg

## Copies to:

~~Mr. D. B. Albright - BB~~  
 Mr. F. J. Gallo - BB  
 Mr. R. E. Graebert - BB  
 Mr. H. E. Kipp - BB  
 Mr. C. F. Martino - BB  
 Mr. J. Olszewski - BB  
 Mr. P. B. Potter - NY  
 Mr. G. Pugliese - BB  
 Mr. J. Raffaniello - BB  
 Mr. C. J. Smith - BB  
 Mr. A. L. Steib - BB  
 Mr. P. A. Thomas - BB

UCASB00958491



INTERNAL CORRESPONDENCE

## UNION CARBIDE PLASTICS COMPANY

To (Name) Mr. G. J. Kuzmak  
Company Union Carbide Corporation  
Division Plastics Division  
Bound Brook, New Jersey

Date January 18, 1965  
Originating Dept. Applications - R & D

Answering letter date

Copy to  
~~Mr. D. R. Albright - BB~~  
Mr. F. J. Gallo - BB  
Mr. R. E. Graebert - BB  
Mr. H. E. Kipp - BB  
Mr. C. F. Martino - BB  
Mr. J. Olszewski - BB  
Mr. P. B. Potter - NY  
Mr. G. Pugliese - BB

COPY  
Subject

Production Run of  
BMMA-5715 Black 25

Mr. J. Raffaniello - BB  
Mr. C. J. Smith - BB  
Mr. A. L. Steib - BB  
Mr. P. A. Thomas - BB

As a result of the successful evaluation of BMMA-5715 batch 8 at Cutler-Hammer, the customer has placed an order for a truckload quantity of this material, which will include 1500 pounds from a new production batch. Accordingly, a "Development Department Request for Use of Production Department Equipment" is being submitted to cover the production of 25,000 pounds of this material in the special grade 16 for Cutler-Hammer. The material will be made on Unit BA.

The manufacturing instructions are attached. No processing problems are anticipated, since the previous batch (batch 8) was made with no particular difficulties. The preheat latitude of the last batch was found to be considerably improved by using the lowest roll temperatures possible, and by limiting the amount of fines recirculated to 750 pounds per 2000 pound raw mix.

As in the previous run, the "caution label" on the bags must be blanked out. Also, to facilitate handling in the customer's plant, each pallet should contain a maximum of 1500 pounds of material.

*L. D. Fishberg*  
L. D. Fishberg

LDF:cah  
Att.

UCASB00958492



INTERNAL CORRESPONDENCE

## UNION CARBIDE PLASTICS COMPANY

o (Name) Mr. D. R. Albright Date July 7, 1965  
 company Plastics Division - UCC  
 location Bound Brook, New Jersey Originating Dept Applications - R & D

Answering letter date

copy to See distribution list below Subject Production Run of BMMA-5715  
Black 25

On June of 1965, Cutler-Hammer successfully evaluated batches 8 and 11, BMMA-5715 Black 25, on their new Stokes Injectoset press. These batches had previously been approved for use on their standard plunger presses. Accordingly, Cutler has ordered 2 truck-loads of this material to be delivered during the month of July. Since there is not enough in stock to fill these orders, a "Development Department Request for Use of Production Equipment" is being entered to cover the production of 50,000 pounds of material on Unit BA. It is to be made in Grade 16, a plasticity range set up specifically to meet Cutler's requirements.

The manufacturing instructions are attached. Since this is the sixth time this material has been made (Grade 16 only), transfer will be requested at the conclusion of this run for Grades 16 and 18. No particular processing problems are anticipated as long as the specifications for roll temperatures and the amount of fines to be recirculated are adhered to.

As with previous production batches for Cutler, the "caution label" on each bag must be blanked out. Also, each pallet should contain a maximum of 1500 pounds of material.

LDF:bcm  
 Attachment

*Lewis D. Fishberg*  
 Lewis D. Fishberg

cc: Mr. F. Bader - BB  
 Mr. F. J. Gallo - BB  
 Mr. R. E. Graebert - BB  
 Mr. H. E. Kipp - BB  
 Mr. C. F. Martino - BB  
 Mr. L. W. Michalowicz - BB  
 Mr. J. Olszewski - BB

Mr. P. B. Potter - NY  
 Mr. G. Pugliese - BB  
 Mr. J. Raffaniello - BB  
 Mr. C. J. Smith - BB  
 Mr. A. L. Steib - BB  
 Mr. P. A. Thomas - BB

UCASB00958501

UNION CARBIDE CORPORATION  
PLASTICS DIVISION

RIVER ROAD, BRIDGE PLAZA, N. J. 07035

Product No. DMMA 5715

Color BL 25

Prepared By L.D. FISHER

Approved By \_\_\_\_\_

Issue Dated \_\_\_\_\_

Supersedes - \_\_\_\_\_  
Issue Dated \_\_\_\_\_

Formula  
And  
Manufacturing  
Instructions



"A" Reel  
Blender  
Blend for  
15  
Mins.

Entoleter  
☒ Yes ☐ No

Tumbler  
Blend for  
\_\_\_\_\_  
Mins.

"B" Reel  
Blender  
Max. Hold  
1  
Hrs.

Cutter  
Screens  
3/8"

Rotex  
Screens  
10M/1XX

Reel  
Blender  
Blend for  
45  
Mins.

Charge Rolls

Rolling Cycle  
40/40

Front  
Temp. Max.

150°F

Back  
Temp. 60°F  
Variation  
58 To 62

No. of Cuts 3

Sheet Wgt. 25

Finish Rolls

Rolling Cycle  
\_\_\_\_\_

Front  
Temp. Max.

250

Back  
Temp. Max.

W

Squeeze Rolls

Front  
☐ Water  
☒ None

80°F

Back  
Temp. Max.

W

Sheet Thick. .110"

Quality Control Tests

*See attached sheet*

UCASB00958502

## Formula

| RM Number | Description                         | Grade | 16          | 6 | 9 | 12 | 15 | 18 |  |
|-----------|-------------------------------------|-------|-------------|---|---|----|----|----|--|
|           |                                     |       |             |   |   |    |    |    |  |
| RM 5751   | (0415411) Two-step resin            | 1412  | 835         |   |   |    |    |    |  |
| RM 46     | (4071) Alpha                        |       | 119         |   |   |    |    |    |  |
| RM 165    | (16036) Wood filler                 |       | 635         |   |   |    |    |    |  |
| RM 25A    | (25016) Nigrosine                   |       | 36          |   |   |    |    |    |  |
| RM 52C    | (52036) Lime                        |       | 80          |   |   |    |    |    |  |
| RM 134P   | (134166) Poly flock                 |       | 200         |   |   |    |    |    |  |
| RM 70B    | (10026) Calcium stearate            |       | 15          |   |   |    |    |    |  |
| T.M. 5563 | (455636) Rubston flints (grit free) |       | 80          |   |   |    |    |    |  |
|           | TOTAL                               |       | 2000 #      |   |   |    |    |    |  |
|           | Re-work fines                       |       | 750 # (Max) |   |   |    |    |    |  |
| RM 1281   | (128166) Lithium stearate           |       |             |   |   |    |    |    |  |
|           | (blended externally)                |       | 1           |   |   |    |    |    |  |
|           |                                     |       |             |   |   |    |    |    |  |
|           |                                     |       |             |   |   |    |    |    |  |
|           |                                     |       |             |   |   |    |    |    |  |
|           |                                     |       |             |   |   |    |    |    |  |
|           |                                     |       |             |   |   |    |    |    |  |
|           |                                     |       |             |   |   |    |    |    |  |
|           |                                     |       |             |   |   |    |    |    |  |
|           |                                     |       |             |   |   |    |    |    |  |

**TENTATIVE CONDENSED MANUFACTURING INSTRUCTIONS**  
DEVELOPMENT DEPARTMENT

|             |                  |
|-------------|------------------|
| PRODUCT NO. | BMMA-5715 BK 25  |
| ISSUE NO.   | I                |
| DATE        | 2 September 1965 |
| SUPERSEDES  |                  |

HAZARDS TO PERSONNEL, EQUIPMENT, OR MATERIAL: Usual for phenolic molding materials.

MANUFACTURING INSTRUCTIONS: In addition to the Formula and Manufacturing Instructions found on the previous pages, the following guides should be observed:

1. Resin specifications: BRN-5351 - 14.0-17.0 CST viscosity.
2. It is imperative that no more than 750 pounds of fines be re-circulated as rework in each 2000 pound mix. Do not put heat on back finish roll. Also the roll temperatures should be held to those specified. These steps will insure that material will have the maximum plunger molding latitude for which it was designed.
3. Change plasticity by varying resin/hexa with wood flour.
4. Insure that Izod impact does not drop below 0.37 minimum. If low, add 1% RM 134P, and subtract from RM 16C.
5. Be sure to blend each tank for 45 minutes to get highest apparent density. Slide on rotex should be pushed all the way in to get proper fines content.
6. Blend through CBS. Drums, bags or gaylords may be used for packing.
7. Special packing requirements for Cutler Hammer: "Caution" label on container must be blanked out. Each pallet should contain a maximum of 1500 pounds.

SIGNED

- 7 -

*Lewis D. Fikberg*  
ORIGINATOR